## **CLAIMS**

1.

1

## What is claimed is:

1	1. A method comprising:
2	establishing a file transfer session between an information transferring network
3	device that has entered a debug mode and a server, a name of a last known good image
4	and configuration file pair being stored on the network device, the last known good
5	image and configuration file pair being stored on the server; and

- 6 requesting a transfer of the last known good image and configuration file pair 7 from the server to the network device.
- 1 2. The method of claim 1 further comprising detecting the network device in fatal mode and entering the debug mode on the network device upon detecting the 2 3 network device in fatal mode.
- The method of claim 1 further comprising receiving a command of a user 1 3. and entering the debug mode on the network device upon receiving the command of the 2 3 user.
- The method of claim 1 wherein the file transfer session is a Trivial File 1 4. 2 Transfer Protocol (TFTP) session.

1	5. The method of claim 1 further comprising receiving the transfer of the		
2	last known good image and configuration file pair from the server to the network		
3	device.		
1	6. The method of claim 5 further comprising automatically restoring the		
2	network device from debug mode to working mode after receiving the transfer of the		
3	last known good image and configuration file pair from the server to the network		
4	device.		
1	7. The method of claim 1 wherein establishing a file transfer session		
2	between an information transferring network device that has entered a debug mode and		
3	a server includes		
4	establishing a first file transfer session with a first server, a first image and		
5	configuration file pair being stored on the first server,		
6	determining whether the first image and configuration file pair is the last known		
7	good image and configuration file pair,		
8	establishing a second file transfer session with a second server, a second image		
9	and configuration file pair being stored on the second server,		
10	determining whether the second image and configuration file pair is the last		
11	known good image and configuration file pair, and		
12	wherein the method further includes requesting a transfer of one of the first or		
13	second image and configuration file pair that is the last known good image and		
14	configuration file pair from the server to the network device.		

1	8. A method comprising:
2	detecting that an information transferring network device has entered a debug
3	mode, a name of a last known good image and configuration file pair being stored on
4	the network device;
5	establishing a first file transfer session between the network device and a first
6	server, a first image and configuration file pair being stored on the first server;
7	determining whether the first image and configuration file pair is the last known
8	good image and configuration file pair;
9	establishing a second file transfer session between the network device and a
10	second server, a second image and configuration file pair being stored on the second
11	server;
12	determining whether the second image and configuration file pair is the last
13	known good image and configuration file pair; and
14	requesting a transfer of one of the first or second image and configuration file
15	pair that is the last known good image and configuration file pair from the server to the
16	network device.

- 1 9. The method of claim 8 further comprising detecting the network device 2 in fatal mode and entering the debug mode on the network device upon detecting the 3 network device in fatal mode.
- 1 10. The method of claim 8 further comprising receiving a command of a user 2 and entering the debug mode on the network device upon receiving the command of the 3 user.

4

5

6

7

1	11.	The method of claim 8 wherein the file transfer session is a Trivial File
2	Transfer Protocol (TFTP) session.	
1	12.	The method of claim 8 further comprising receiving the transfer of the

- last known good image and configuration file pair from the server to the network
   device.
- 1 13. The method of claim 12 further comprising automatically restoring the
  2 network device from debug mode to working mode after receiving the transfer of the
  3 last known good image and configuration file pair from the server to the network
  4 device.
- 1 14. An apparatus comprising a machine accessible medium containing 2 instructions which, when executed by a machine, cause the machine to perform 3 operations comprising:
  - establishing a file transfer session between an information transferring network device that has entered a debug mode and a server, a name of a last known good image and configuration file pair being stored on the network device, the last known good image and configuration file pair being stored on the server; and
- requesting a transfer of the last known good image and configuration file pair
  from the server to the network device.

1	15.	The apparatus of claim 14 further comprising detecting the network
2	device in fata	l mode and entering the debug mode on the network device upon detecting
3	the network d	levice in fatal mode.
1	16.	The apparatus of claim 14 further comprising receiving a command of a
2	user and enter	ring the debug mode on the network device upon receiving the command
3	of the user.	
1	17.	The apparatus of claim 14 wherein the file transfer session is a Trivial
2	File Transfer	Protocol (TFTP) session.
1		
1	18.	The apparatus of claim 14 further comprising receiving the transfer of the
2	last known go	ood image and configuration file pair from the server to the network
3	device.	
1	19.	The apparatus of claim 18 further comprising automatically restoring the
2	network device	ce from debug mode to working mode after receiving the transfer of the
3	last known go	ood image and configuration file pair from the server to the network

- 1 20. The apparatus of claim 14 wherein establishing a file transfer session
- 2 between an information transferring network device that has entered a debug mode and
- 3 a server includes

device.

4

4	establishing a first file transfer session with a first server, a first image and		
5	configuration file pair being stored on the first server,		
6	determining whether the first image and configuration file pair is the last known		
7	good image and configuration file pair,		
8	establishing a second file transfer session with a second server, a second image		
9	and configuration file pair being stored on the second server,		
10	determining whether the second image and configuration file pair is the last		
11	known good image and configuration file pair, and		
12	wherein the method further includes requesting a transfer of one of the first or		
13	second image and configuration file pair that is the last known good image and		
14	configuration file pair from the server to the network device.		
1	21. An apparatus comprising a machine accessible medium containing		
2	instructions which, when executed by a machine, cause the machine to perform		
3	operations comprising:		
4	detecting that an information transferring network device has entered a debug		
5	mode, a name of a last known good image and configuration file pair being stored on		
6	the network device;		
7	establishing a first file transfer session between the network device and a first		
8	server, a first image and configuration file pair being stored on the first server;		
9	determining whether the first image and configuration file pair is the last known		
10	good image and configuration file pair;		

1	establishing a second file transfer session between the network device and a
12	second server, a second image and configuration file pair being stored on the second
13	server;
14	determining whether the second image and configuration file pair is the last
15	known good image and configuration file pair; and
16	requesting a transfer of one of the first or second image and configuration file
17	pair that is the last known good image and configuration file pair from the server to the
18	network device.

- 1 22. The apparatus of claim 21 further comprising detecting the network 2 device in fatal mode and entering the debug mode on the network device upon detecting 3 the network device in fatal mode.
- 1 23. The apparatus of claim 21 further comprising receiving a command of a user and entering the debug mode on the network device upon receiving the command of the user.
- 1 24. The apparatus of claim 21 wherein the file transfer session is a Trivial 2 File Transfer Protocol (TFTP) session.
- 1 25. The apparatus of claim 21 further comprising receiving the transfer of the last known good image and configuration file pair from the server to the network device.

- 1 26. The apparatus of claim 25 further comprising automatically restoring the
- 2 network device from debug mode to working mode after receiving the transfer of the
- 3 last known good image and configuration file pair from the server to the network
- 4 device.

1